

C2  
substrate, the three layer coextrusion comprising a blend barrier layer made from ethylene vinyl alcohol copolymer and a polyolefin, an adhesive tie layer, and a layer of low density polyethylene; wherein the blend barrier layer comprises 35%-95% ethylene vinyl alcohol copolymer, the tie layer being between the blend barrier layer and the layer of low density polyethylene.

---

C4  
30. The package produced from a laminate in accordance with claim 26, wherein the adhesive tie layer is a modified polyethylene or modified polypropylene.

---

#### REMARKS

By this Amendment, claims 19-31 are pending.

The invention is a laminate having a paper substrate and a three layer coextrusion on one side consisting of a blend layer having EVOH/PE, an adhesive tie layer and a low density polyethylene layer, as recited in independent claims 19 and 26.

In the Office Action of January 29, 2003, the Examiner rejected claims 19-22 and 26-28 as being obvious over Svensson (EP 0423511) in view of Harita et al. The Examiner stated that Svensson discloses a laminate having a paper substrate, an adhesive layer formed of polyethylene and an EVOH/PE barrier layer having 20-80% polyethylene, preferably 50-80% polyethylene and most preferably 60% polyethylene. Svensson does not disclose an additional layer of low density polyethylene and the Examiner relies upon Harita et al for disclosing a low density polyethylene as a heat sealing layer and concludes it would have been obvious to add a low density polyethylene layer to Svensson for its heat sealing properties. This rejection is respectfully traversed.

It would not have been obvious to add a layer of low density polyethylene to the substrate disclosed by Svensson as any blend layer having less than 65% polyethylene results in a continuous EVOH layer with discrete polyethylene regions. A layer of polyethylene would not adhere to a continuous EVOH layer, as suggested by the Examiner's combination. Any polyethylene layer applied directly to a blend layer having less than 65% PE, the claimed range, would easily delaminate. A tie layer between the two layers is necessary. One of ordinary skill

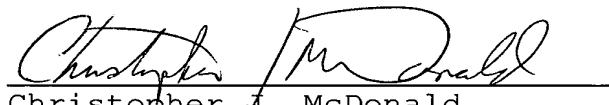
in the art, attempting to add a layer of low density polyethylene to the laminate disclosed by Svensson would find a laminate that is not useful.

A blend having 70% polyethylene exhibits a transition phase between EVOH and LDPE continuous structures. An 80% LDPE blend results in LDPE continuous structure with discrete EVOH regions. The transition of the characteristics of a blend which occurs when the amount of polyethylene in the blend is above or below 65% is a significant discovery leading to the structure of the invention. The phenomena of the different characteristics of the blend based on the polyethylene percent is not discussed or suggested by Svensson.

The claims, as amended, are allowable over the prior art and favorable action is eagerly and earnestly solicited. If any issues remain, and the Examiner believes a telephone conversation would resolve such issues, the Examiner is urged to contact the undersigned attorney.

If any fees are due or owing, please charge Deposit Account 08-2455.

Respectfully submitted,

  
Christopher J. McDonald  
Reg. 41,533

April 29, 2003

HOFFMAN, WASSON & GITLER, PC  
2361 Jefferson Davis Highway  
Suite 522  
Arlington, VA 22202  
(703) 415-0100

Attorney's Docket: A-7273.ROA/cat

RECEIVED  
APR 29 2003  
TECHNOLOGY CENTER 1700

19. A laminate for producing a paper package comprising: a paper substrate; and a three layer coextrusion coated onto the substrate, the three layer coextrusion comprising a blend barrier layer made from ethylene vinyl alcohol copolymer and a polyolefin, [an] a first adhesive tie layer, and a layer of low density polyethylene; wherein the blend barrier layer comprises 35%-95% ethylene vinyl alcohol copolymer, the tie layer being between the blend barrier layer and the layer of low density polyethylene.

20. The laminate as claimed in claim 19, further comprising [an] a second adhesive tie layer coated on the paper substrate between the substrate and the three layer coextrusion.

24. The laminate for producing a paper package in accordance with claim [19] 20, wherein the first and second adhesive tie layer is a modified polyethylene or modified polypropylene.

26. A package produced from a laminate comprising: a paper substrate; and a three layer coextrusion coated onto the substrate, the three layer coextrusion comprising a blend barrier layer made from ethylene vinyl alcohol copolymer and a polyolefin, an adhesive tie layer, and a layer of low density polyethylene; wherein the blend barrier layer comprises 35%-95% ethylene vinyl alcohol copolymer, the tie layer being between the blend barrier layer and the layer of low density polyethylene.

30. The package produced from a laminate in accordance with claim 26, wherein the [first and second] adhesive tie layer is a modified polyethylene or modified polypropylene.

RECEIVED  
APR 29 2003  
TECHNOLOGY CENTER 1700